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10/568,617	02/16/2006	Wolfgang Peter	60291.000045	9357

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EXAMINER

KIRSCH, ANDREW THOMAS

ART UNIT	PAPER NUMBER
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3781

MAIL DATE	DELIVERY MODE
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06/21/2011

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/568,617	Applicant(s) PETER ET AL.	
	Examiner ANDREW T. KIRSCH	Art Unit 3781	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-37 is/are pending in the application.
- 4a) Of the above claim(s) 1,9-11,15-26 and 35 is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 2-8,12-14,27-34,36 and 37 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 16 February 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____. |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

1. The amendment filed 4/18/2011 has been entered.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

1. Claims 3-7 and 29-32 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

3. Claims 3-7 and 29-32 recite "the angle differing from zero," but does not specify which of the two angles differing from zero mentioned in each of claims 2 and 27 is the one to be referenced. For the purposes of examination, the angle of the flat web is to be the angle differing from zero referred to by claims 3-7 and 29-32.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 2, 3, 5, 8, 12, 14, 27-29, 31, 34, and 37 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. PG Pub No. 2002/0050493 (Ball et al. hereinafter).

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6. In re claim 2, with reference to Figs. 2A, 4A, 12 and 13 below, Ball et al. discloses: A lever ring (16) for seaming to a body and for receiving a closure layer (28) affixed with an edge portion thereof by sealing (46) and for bridging an inner space of the lever ring, to close the body in a seam-connected position (page 9, paragraph [0095]), wherein (i) the lever ring has a surrounding continuous flat web (30) which radially outwardly merges into an edge rim (see Fig. 12) of the lever ring, a continuous surrounding groove (see Fig. 12) extending between the edge rim and the flat web; (ii) the flat web extends upwardly inclined (see Fig. 12) from a horizontal plane at an angle differing from zero (page 7, paragraph 76) and is provided with an inner curling (36) on its radially inner end so that a closure layer sealed to the flat web and subjected to a pressure force acting vertically to a plane of extension of the closure layer (as in peeling) introduces a substantial force component into a sealing zone, so that the force component extends in an extension direction of the sealing zone; and the inner curling (36) is configured to deflect the closure layer so that an edge strip is formed (see Fig. 12) that extends at an angle differing from zero with respect to a plane of the closure layer in the inner space of the lever ring (note that the angle of the closure layer in the inner space is effectively zero degrees, and that the area denoted "sealing strip" extends in a direction at an angle differing from zero).

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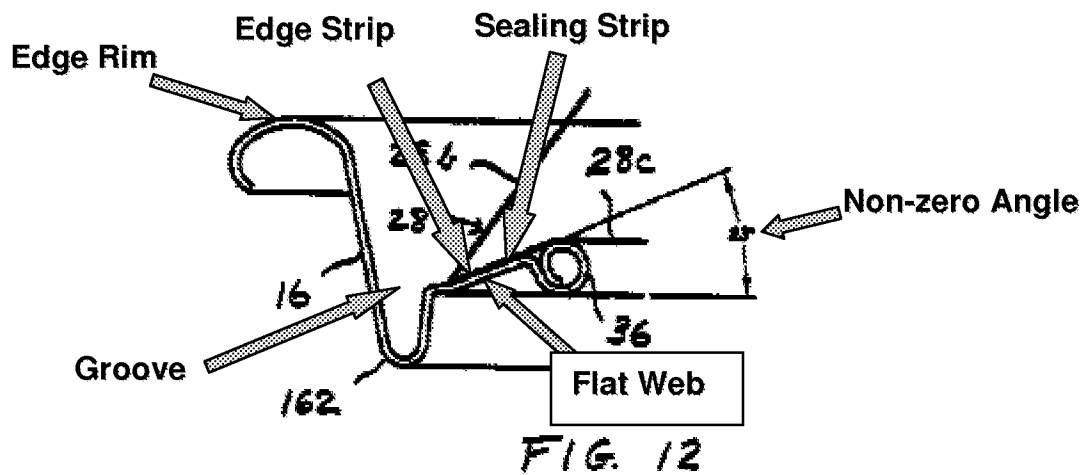


Fig. 12 of U.S. PG Pub No. 2002/0050493 (Ball et al. hereinafter)

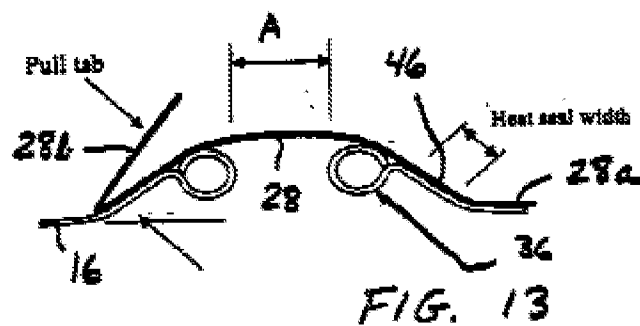
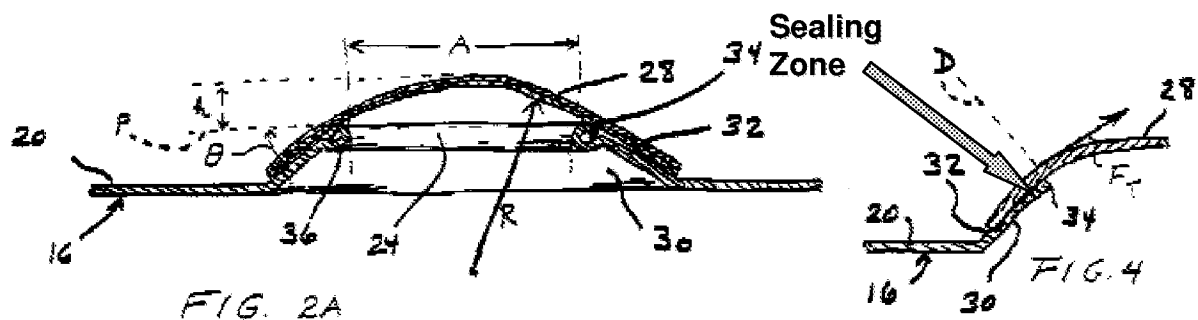


Fig. 13 of U.S. PG Pub No. 2002/0050493 (Ball et al. hereinafter)



Figs. 2A and 4 of U.S. PG Pub No. 2002/0050493 (Ball et al. hereinafter)

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7. In re claim 3, with reference to Fig. 12 above, Ball et al. discloses the claimed invention including wherein the angle differing from zero is between substantially 10° and substantially 90° (see Fig. 12: "23°").

8. In re claim 5, with reference to Fig. 12 above, Ball et al. discloses the claimed invention including wherein the angle is between substantially 25° and 35° (page 7, paragraph 76).

9. In re claim 8, with reference to Figs. 2A, 4 and 13 above, Ball et al. discloses the claimed invention including wherein said receiving and sealing of the closure layer (28) is a sealing of an edge portion of the closure layer in a sealing zone (46) the flat web (30) which sealing zone extends circumferentially (paragraph 0074, see Fig. 15).

10. In re claim 12, with reference to Fig. 13 above, Ball et al. discloses the claimed invention including wherein the sealing zone as a strip extending circumferentially (46) has a substantial width of extension on the flat web (30), the width being more than half a width of the flat web (see Fig. 13 above).

11. In re claim 14, with reference to Fig. 12 above, Ball et al. discloses the claimed invention including wherein the groove (see Fig. 12) is wedge-shaped with a rounded bottom and is formed between a chuck wall extending towards the surrounding lid rim (2) and the surrounding inclined flat web (30).

12. In re claim 27, with reference to the Figs. above, Ball et al. discloses: A combination of a lid ring for seaming to a body and a closure layer sealed by a surrounding edge portion to the lever ring and bridging an inner space of the lever ring, to close the body in a seam-connected position (as in re claim 2 above), wherein (i) the

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lever ring has a continuous surrounding flat web (30) which radially outwardly merges into an edge rim of the lever ring, a continuous surrounding groove extending between the edge rim and the flat web (as in re claim 2 above); (ii) onto the surrounding flat web the surrounding edge portion of the closure layer (28) is affixed by sealing along a sealing strip (see Fig. 12 above) extending circumferentially and having a substantial width on the flat web, this width being more than half of a width of the flat web (see Fig. 13 above), the flat web extending at an angle differing from zero with respect to a plane of the closure layer affixed by said sealing (see Fig. 12); and (iii) the closure layer being a metal foil (paragraph 73) and extending over the inner curling (36) so that the closure layer is deflected forming an edge strip (see "edge strip" Fig. 12) that extends at an angle differing from zero with respect to a plane of the closure layer in the inner space of the lever ring (note that the angle of the closure layer in the inner space is effectively zero degrees, and that the area denoted "edge strip" extends in a direction at an angle differing from zero).

13. In re claim 28, with reference to Fig. 12 above, Ball et al. discloses the claimed invention including wherein the flat web (30) comprises radially inwards an inner curling (36).

14. In re claim 29, with reference to Fig. 12 above, Ball et al. discloses the claimed invention including wherein the angle differing from zero is between substantially 10° and substantially 90° (see Fig. 12: "23").

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15. In re claim 31, with reference to Fig. 12 above, Ball et al. discloses the claimed invention including wherein the angle is between substantially 25° and 35° (page 7, paragraph 76).

16. In re claim 34, with reference to Figs. 2A, 4 and 13 above, Ball et al. discloses the claimed invention including wherein said receiving and sealing of the closure layer (28) is a sealing of an edge portion of the closure layer in a sealing zone (46) the flat web (30) which sealing zone extends circumferentially (paragraph 0074, see Fig. 15).

17. In re claim 37, with reference to Fig. 12 above, Ball et al. discloses the claimed invention including wherein the groove (see Fig. 12) is wedge-shaped with a rounded bottom and is formed between a chuck wall extending towards the surrounding lid rim (2) and the surrounding inclined flat web (30).

Claim Rejections - 35 USC § 103

18. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

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19. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

20. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

21. Claims 4, 6-7, 30, 32, and 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ball et al.

22. In re claims 4 and 30, with reference to the Figures above, Ball et al. discloses the claimed invention except wherein the angle (α_2) is between substantially 40° and 60°.

23. However, Ball et al. teaches that slope angle of the flange (flat web) should be chosen to be sufficiently large so as to be compatible with the bulging characteristic of the chosen closure member material (page 7, paragraph 85).

24. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have interpreted the teaching of Ball et al. and realized various angles based on the selection of the closure layer (28) material. This teaching alludes to the relationship between the closure layer material and angle under circumstances

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that would require a larger or steeper angle even though Ball et al. only discloses a range of angles from "about 12.5 degrees" to "about 30 degrees."

25. In re claims 6 and 32, with reference to the Figures above, Ball et al. discloses the claimed invention except wherein the angle is between substantially 80° and 90°.

26. However, as described above, Ball et al. teaches a relationship between the closure layer material and the angle of the flat web (page 7, paragraph 85).

27. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have interpreted the teaching of Ball et al. and realized various angles based on the selection of the closure layer (28) material. It would not have been unreasonable to have arrived at an angle between substantially 80 and 90 degrees based on the selection of material for the closure layer as well as the internal pressure characteristic of the desired stored contents which relates directly to the peeling and tensile forces imparted on the closure layer (page 7, paragraph 83).

28. In re claims 7 and 33, with reference to the Figures above, Ball et al. discloses the claimed invention except wherein the angle differing from zero extends substantially vertically to the extension of the plane of the closure layer (28).

29. However, as described above, Ball et al. teaches a relationship between the closure layer material and the angle of the flat web (page 7, paragraph 85).

30. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have interpreted the teaching of Ball et al. and realized various angles based on the selection of the closure layer (28) material. It would not have been unreasonable to have arrived at an angle between substantially 80 and 90 degrees (i.e.:

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substantially vertical) based on the selection of material for the closure layer as well as the internal pressure characteristic of the desired stored contents which relates directly to the peeling and tensile forces imparted on the closure layer (page 7, paragraph 83).

31. Claims 13 and 36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ball et al. as applied to claims 1 and 2 above, and further in view of U.S. Patent No. 6,082,944 (Bachmann et al. hereinafter).

32. In re claims 13 and 36, with reference to the Figures above, Ball et al. discloses the claimed invention including an alignment of the flat web that projects steeply upwards.

33. Ball et al. fails to disclose wherein the inner curling (at the flat web) axially projects above an upper side/level of the lid rim.

34. However, with reference to Fig. 2 below, Bachmann et al. discloses a can end configuration with a removable closure layer (14), in which an inner curling (30) axially projects above an upper side/level of the lid rim (see Fig. 2).

FIG.2

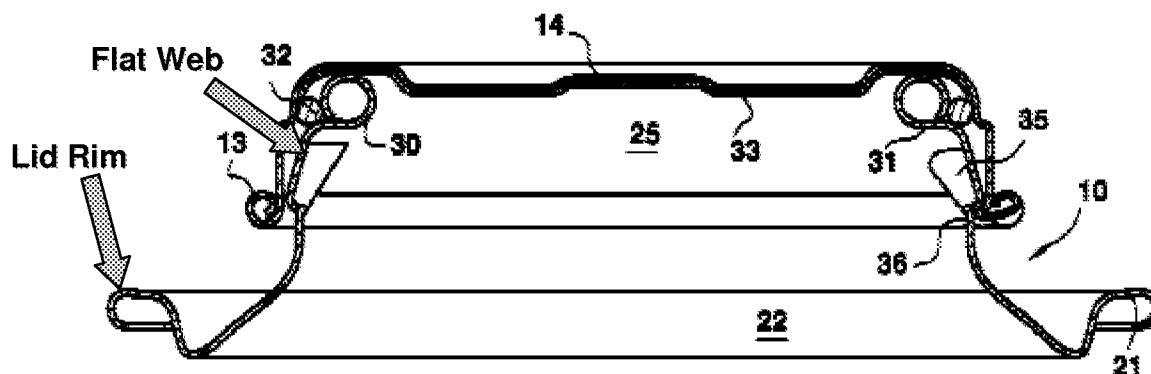


Fig. 2 of U.S. Patent No. 6,082,944 (Bachmann et al. hereinafter)

35. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have modified the curl of Ball et al. to be elevated in relation to the upper side/level of the lid rim as taught by Bachmann et al. Such a modification would have allowed for improved mouth construction for better pouring and drinking comfort (column 2, lines 15-23).

Response to Arguments

36. Applicant's arguments filed 4/18/2011 have been fully considered but they are not persuasive.

37. On page 2 of the Remarks, Applicant argues that one of ordinary skill in the art would automatically envision several complex layers of structure upon encountering the term "lever ring" or "lid ring." However, a search for the specific term "lever ring" and "lid ring" did not present the Examiner with any consistent structure to consider the term as carrying the inherent structural limitations insisted by the Applicant, and does not prevent the Examiner from employing the broadest reasonable interpretation consistent with the prior art.

38. Applicant argues on page 3 of the Remarks that element 30 of Ball is not a continuous flat web, but is a shallow frustoconical annular flange. However, note that the "continuous flat web" of Applicant's figures 1-3 is also frustoconical, and annular, and is no more "flat" than that of Ball's element 30.

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39. Applicant also argues on page 3 of the Remarks that the term “continuous” implies “fully surrounding.” However, there is no indication of the nature of the continuity of the web claimed, allowing continuity to be interpreted as continuing from one arbitrary point to another. Furthermore, claim 2 does not mention what specific structure the groove is to surround, only that it is “surrounding.”

40. Applicant argues on page 4 of the Remarks that two structures cannot merge with another if there is an intermediate portion. However, there is no connotation to the term “merge” which would exclude an interpretation of two entities merging via an intermediate portion. The definition of “merge” is “to combine or unite” as two roads can “merge” via the ramp that connects the two flows of traffic, or a wing of a jet can “merge” or “combine” with the fuselage via the bolts and welds that hold them together.

Conclusion

2. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to ANDREW T. KIRSCH whose telephone number is (571)270-5723. The examiner can normally be reached on M-Th, 6:30am-5pm, off Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Anthony Stashick can be reached on 571-272-4561. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/ANDREW T KIRSCH/

Examiner, Art Unit 3781

/Anthony Stashick/
Supervisory Patent Examiner, Art
Unit 3781